cont
A2

In all bacterial RNAs, the sequences of the LHL, which contains A1067, are identical. The RNAs were--

A separate sheet is attached which shows the changes made to the original paragraph amended herein.

REMARKS

Applicants submit that submitted herewith is a substitute paper copy and an initial computer readable copy of the Sequence Listing as required by the Notice to File Missing Parts.

In accordance with 37 C.F.R. §1.821 (f)(g) Applicants hereby state that the paper copy and the computer readable form of the Sequence Listing submitted herewith in the above-identified patent application are supported in the application and contain no new matter. Applicants hereby further state that the information recorded in computer readable form is identical to the written sequence listing.

9/23/01

Date

Kathleen M. Williams
Reg. No. 34, 380
Attorney for Applicant
Palmer & Dodge LLP
One Beacon Street
Boston, MA 02108
Phone: (617) 573-0451
Fax: (617) 227-4420

Marked-up Version of Amendments:

1. The *tsr* gene (John Innes Foundation, Norwich) was cloned and overexpressed in *E.coli*. The methylation activity of the *tsr* methyltransferase was investigated using complete 23S *E.coli* rRNA and the 60mer mGAR from *Thermotoga maritima*. (sequence: GGCUGGGAUGUUGGCUUAGAAGCAGCCAUCAUUUAAAGAGUGCGUAACAGCUCACCAGCC; SEQ ID NO: 1, with the methylation site underlined).

2. Four further RNA substrates were tested: the left-hand loop (LHL) 29mer of *E.coli* mGAR (GGAUGUUGGCUUAGAAGCAGCCAUCAUCC; SEQ ID NO: 2, methylation site underlined); a 17mer fragment of that 29mer (GGGCUUAGAAGCAGCCU; SEQ ID NO: 3, methylation site underlined); and *Homo sapiens* mGAR (GGCAGGACGGUGGCCAUGGAAGUCGGAAUCCGCUAAGGAGUGUGUAACAACUCACCUGCC; SEQ ID NO: 4, the underlined residue being the homologous position to the methylation site in prokaryotes). In all bacterial RNAs, the sequences of the LHL, which contains A1067, are identical. The RNAs were